



99610211563LN

LN/FSI Underdrive Pulley

Installation Instructions

Fitment

Porsche 911 996/997.1 Models (excluding 997.1 models with the 3.8 liter M97.01 engine and GT3, Turbo, and GT2 models)
986 Boxster / 987.1 Boxster and Cayman Models

The LN Engineering / Flat 6 Innovations 99610211563LN kit includes a crankshaft underdrive pulley, pulley wrench, crankshaft bolt, and serpentine belt. Use replacement serpentine belt LN part no. 6PK.

Need technical assistance? Visit the LN Engineering website and [create a support ticket](#) to receive free technical support. Professional installation is recommended.

TOOLS REQUIRED: 1/2" drive ratchet, 1/2" drive 24mm socket (*socket no longer than 30mm is needed on Boxster models*), 3/8" drive ratchet, 3/8" drive 10mm, 13mm, and E12 sockets, 10mm and 24mm wrench, 7mm nut driver, and die grinder or similar tool. *Additional tools may ne needed.*

1. On 911 models, remove air filter housing assembly. *Inspect the oil fill tube and replace if cracked or brittle.* On Boxster models, move seats to the forward-most position and remove carpet and lining to expose and remove the engine compartment lid. *The front of the engine and the crankshaft pulley should now be accessible.*
2. Remove serpentine drive belt.
3. Break crankshaft pulley bolt loose then remove fastening bolt and factory pulley. Save the washer for re-installation. *Do not discard the original pulley as it may be later needed to carry out engine repairs.*
4. Inspect crankshaft pulley seal. If leaking, replace crankshaft front seal using tool LN part no. [99911347540-TOOL](#).
5. Remove idler pulley closest to the crankshaft pulley (not the tensioning idler). *Check all idler pulley bearings and replace if worn before reinstallation.*
6. Shorten the timing boss on the front of the crankcase (by ~5mm) using die grinder or similar tool to provide the required clearance when installing the new underdrive crankshaft pulley. Test fit the new underdrive pulley to ensure you have removed enough of the boss to prevent the pulley from making contact with the boss throughout the process.
7. Install the new underdrive crankshaft pulley using the supplied new crankshaft pulley bolt and original washer. *Optional: you can use a very small amount of blue Loctite (not included) on crankshaft pulley bolt threads.*
8. Use the supplied pulley wrench to counter hold the pulley, then torque the new crankshaft bolt to 50 Nm (37 ft/lb) plus 90° torque angle. *On 911 models, the supplied pulley wrench is designed to rest on the engine cross-member and act as a counter stay. On Boxster models, make sure the wrench handle is firmly secured against the transmission cross-member boss and not wedged on the parking brake cable.*
9. Re-install idler pulley. Torque the idler pulley bolt to 25 Nm (18.5 ft/lb).
10. Re-install the serpentine drive belt using the new replacement supplied in the kit.
11. Remove all tools from the work area and once the area is clear, start the engine to verify proper operation.
12. Re-install the air filter housing on 911 models; re-install the engine compartment lid and removed interior components on Boxster models.